



ENERGY POLICY UPDATE

August 26, 2014

The Energy Policy Update Electronic Newsletter is published by the Arizona Governor's Office Of Energy Policy and is provided free of charge to the public. It contains verbatim excerpts from international, domestic energy, and environment-related publications that are reviewed by Community Outreach Personnel. For inquiries, call 602-771-1143 or toll free to 800-352-5499. To register to receive this newsletter electronically or to unsubscribe, email [Gloria Castro](mailto:Gloria.Castro@az.gov).

UPCOMING WEBINARS

- ✚ ENERGY STAR Webinars
- ✚ U.S. Dept. of Energy Tribal Renewable Energy Webinar Series for 2014

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The Arizona Republic now has limited access. As such, links may or may not work.

ARIZONA-RELATED

[Arizona Regulators Fear Costs, Outages If Coal Plants Closed](#)

[Energy Prospects West, Aug. 19] The Arizona Corporation Commission on Aug. 12 discussed concerns that the U.S. Environmental Protection Agency's proposed carbon-dioxide rule would force the closure of coal-fired power plants, drive power rates higher and trigger power outages in Arizona. The EPA on June 2 proposed reducing power-plant CO₂ emissions 30 percent nationally by 2020, compared to levels in 2005. ACC Chairman Bob Stump said Arizona faced the most onerous requirements among the states. The EPA's proposed CO₂ rule would require Arizona to cut its carbon-dioxide emissions by 52 percent, to 702 lbs/net MWh by 2030, down from 1,453 lbs/MWh in 2012. The 2020 interim goal is 735 lbs/net MWh. It's that steep reduction that has regulators and utilities in Arizona worried, since the state relies heavily on coal. "In setting the emission rate goals for the state of Arizona, EPA assumes that all coal and oil/gas steam generation in the state would be replaced with natural gas generation by 2020," said Scott Harelson, a spokesman for Salt River Project, in an email. One exception would be the 2,250-MW Navajo Generating Station. NGS is located on the Navajo reservation, and EPA intends to issue a supplemental CO₂ rule later for Native American reservations. Harelson cited one of the proposed rule's technical support documents, which shows Arizona's coal generation being reduced from 24.3 million MWh in 2012 to zero in 2020. The document suggests replacing coal-fired generation with electricity from natural gas combined-cycle plants.

[UA Program Promotes Smart Water Use in Arizona and Beyond](#)

The UA's Conserve to Enhance program is helping people save millions of gallons of water across the desert Southwest.

[UA News, Aug. 13] Tucson residents have saved 3.6 million gallons of water while contributing to community enhancement projects through Conserve to Enhance, a program started at the University of Arizona. And now the effort has expanded beyond state boundaries, into Colorado and California, to help people there start their own water conservation and community enhancement programs under the umbrella of the UA-based sustainability endeavor. Known as C2E, [Conserve to Enhance](#) is a program within the [Water Resources Research Center](#) in the [College of Agriculture and Life Sciences](#) and is run by UA employees who oversee outreach, manage the websites and provide guidance to startup C2E groups on other locations. It focuses on helping residents and businesses to conserve water by providing participants with access to an online dashboard that charts and tracks their water usage. Conservation tips and strategies also are provided.

ALTERNATIVE ENERGY & EFFICIENCY

[FERC: All New Capacity in July Came from Renewable Sources](#)

[Power Engineering, Aug. 20] The Federal Energy Regulatory Commission's (FERC) Office of Energy Projects has released an "[Energy Infrastructure Update](#)" report, finding that all new electrical generating capacity in the U.S. in July came from [renewable energy sources](#): 379-MW of wind, 21-MW of solar, and 5-MW of hydropower. For the first seven months of 2014, renewables have accounted for 53.8 percent of the 4,758-MW of new electrical capacity in the nation. Of that, solar accounted for 25.8 percent, wind 25.1 percent, biomass provided 1.8 percent, geothermal 0.7 percent, and hydropower 0.4 percent. Although there has been zero new electrical generating capacity coming from coal or nuclear this year, natural gas accounted for 45.9 percent. To date, renewable sources account for 16.3 percent of all [installed operating generating capacity](#) in the U.S. To read the report, [click here](#).

[Geothermal, Chilled Beam Save School 35% on Energy Bill](#)

[Energy Manager Today, Aug. 22] The new 300,000-sq-foot George Rogers Clark High School in Winchester, Ky., uses a geothermal-based chilled water loop combined with [SEMCO](#) chilled beams and dedicated outdoor air systems for its heating, ventilation and air conditioning (HVAC) system. The building is recording 35 percent less monthly utility costs versus the 30 percent smaller conventional high school it replaced. The school's advanced indoor air quality helped contribute to a district-wide 1.5-percent attendance increase last year, which earned a \$200,000 government-awarded attendance incentive. Furthermore, the school is bigger than most high schools nationwide and ranks as one of Kentucky's largest, but is recording a 31.9-k/BTU energy use index (EUI), significantly less than the 68-k/BTU EUI of an average sized US school. SEMCO awarded the school its Center of Excellence award for its sustainable and energy cost-reducing green design (pictured).

[Labor Unions Create Net Zero Plus Electrical Training](#)

[Energy Manager Today, Aug. 21] Two labor unions in Los Angeles are creating a net zero energy training program and retrofitting a building where the training will be conducted. The International Brotherhood of Electrical Workers Local 11 and the Los Angeles Chapter of the National Electrical Contractors Association have created Net Zero Plus (NZP), which unites energy efficiency practices, clean-energy technologies and career development at a newly expanded Net Zero Plus Electrical Training Institute (NZP ETI). The unions are working with industry partners including: PDE Total Energy Solutions, Environmental Building Strategies, Dynapower, General Electric, Lutron and Kyocera, among others. A 142,000-sq-foot building is being retrofitted for NZP ETI as a Net Zero Plus building, generating more energy than its annual energy demand of nearly 1 MW.

[Seeing Purpose and Profit in Algae](#)

[New York Times, Aug. 18] Entrepreneurs have been trying for years to get something valuable out of algae. It has not been easy, and not just because algae are an unsightly nuisance (and sometimes dangerous, as is the [Lake Erie bloom](#) that has endangered drinking water this month). Although algae grow prodigiously and contain potentially useful molecules — especially [lipids](#), which can be turned into high-energy fuel and other products — extracting those molecules has proved complicated and expensive. So far, virtually the only marketable products based on algae have been high-end skin creams. But a Nevada company, [Algae Systems](#), has a pilot plant in Alabama that, it says, can turn a profit making diesel fuel from algae by simultaneously performing three other tasks: making clean water from municipal sewage (which it uses to fertilize the algae), using the carbon-heavy residue as fertilizer and generating valuable credits for advanced biofuels. If it works, the company says, the process will remove more carbon from the atmosphere than is added when the fuel is burned.

[Verizon Triples Solar Energy with \\$40 Million Investment](#)

[Bloomberg, Aug. 25] Verizon Communications Inc., the largest U.S. wireless carrier, is investing almost \$40 million to triple its use of solar energy this year. SunPower Corp. will install 10.2 megawatts of solar power at eight Verizon sites in New York, California, Maryland, Massachusetts and New Jersey, the New York-based telecommunications company said today in a statement. The New York-based company invested \$100 million last year for about five megawatts of solar capacity and 10 megawatts of fuel cells that were installed at six sites. The new capacity will give Verizon the most solar-generating capacity of any U.S. telecommunications company, according to the Washington-based trade group Solar Energy Industries Association.

[Water Utilities Charge More To Offset Lower Demand](#)

[Associated Press, Aug. 10] WASHINGTON (AP) — Federally mandated low-flow toilets, shower heads and faucets are taking a financial toll on the nation's water utilities, leaving customers to

make up the shortfall with higher water rates and new fees that have left many paying more for less. Utility officials say they understand that charging more for water because demand has dropped might seem to violate a basic premise of Economics 101. But utilities that generally charge by the number of gallons used are beginning to feel the financial pinch of 20 years of environmentally friendly fixtures and appliances, as older bathrooms and kitchens have been remodeled, utility experts say. Federal laws aimed at conserving water limit toilets that once needed up to seven gallons per flush to 1.6 gallons. Shower heads that spewed up to eight gallons per minute are being replaced with sprays of about 2.5 gallons. Adding to the problem, Washington-area utilities say, is the fact that consumption is falling as costs are mounting to upgrade sewer systems and repair and replace aging water pipes, some more than a century old, that are bursting after decades of decay and neglect. Meanwhile, utilities' costs — electricity, chemicals and labor — have continued to rise. Alan Roberson of the American Water Works Association called it a "converging storm."

ENERGY/GENERAL

[Dynergy To Spend \\$6.25B on Power Plant Acquisitions](#)

[Associated Press, Aug. 22] Dynergy plans to spend more than \$6 billion to buy several coal and gas power generation plants from Duke Energy and Energy Capital Partners. Shares of the Houston power producer soared Friday before markets opened and after it announced the deals. The company plans to spend \$2.8 billion on Duke's retail business and ownership interest in several plants and \$3.45 billion for assets of Energy Capital Partners, or ECP. The deal will add about 12,500 megawatts of coal and gas generation and expand Dynergy's retail business into Ohio, Pennsylvania and Michigan. Dynergy said that the deals will boost its presence in the Midwest and New England, including three new markets: Ohio, Pennsylvania and Michigan. The company expects to nearly double its existing portfolio to almost 26,000 megawatts of generating capacity nationally.

[Architects Worldwide Agree To Zero-Carbon Buildings by 2050](#)

Member organizations of the International Union of Architects have unanimously adopted the 2050 Imperative.

[BuildingGreen.com, Aug. 20] The International Union of Architects (UIA) recently adopted the 2050 Imperative committing its member organizations, including the American Institute of Architects (AIA), to plan for healthy, carbon-neutral cities and towns worldwide by the year 2050. The 2050 Imperative was drafted by the organization Architecture 2030, promoter of the 2030 Challenge, which commits signatories to work towards net-zero-energy buildings in the U.S. Now with the architecture councils of Europe, Asia, the Americas, and Africa all agreeing to sign on to a global version, more than 1.3 million architects in 124 countries will have aligned goals. According to a [recent presentation](#) by 2030 Challenge founder, Ed Mazria, FAIA, the 2050 target could be achieved by implementing the 2030 Challenge worldwide for new buildings while reducing fossil-fuel consumption 50% in 2% to 3% of developed nations' existing building stock annually.

INDUSTRIES AND TECHNOLOGIES

[Are Solar Shingles Coming To A Rooftop Near You?](#)

[Solar Industry, Aug. 20] In 2005, solar shingle technology burst onto the solar scene with lofty intentions. Advocates noted the technology would not only revamp photovoltaic solar installation, but transform traditional construction and building methods. Also referred to as building integrated PV, solar shingle technology combines the performance and protection of a conventional asphalt roof with an integrated PV system. Additionally, because solar is embedded into the structure's outer membrane, owners could still get the benefits of PV but without rooftop racking costs, an area of substantial savings. However, after nearly a decade, the revolution has not moved much beyond its early hype. "The technology is still very new and the market still has on its training wheels," says Matt Feinstein, senior analyst who leads solar research at Boston-based consultancy Lux Research. For starters, Feinstein notes, the biggest challenge confronting solar shingles has been its inability to compete with rooftop solar, which is cheaper and more reliable. And because they are part of the building's physical infrastructure, solar shingle technology must meet strict building codes - an added hurdle.

[DOE Sees Response To Fossil Fuel Power Generation Tech Programs](#)

[Electric Light & Power, Aug. 22] An official with the federal loan guarantee program told CoalGen Aug. 20 that the Department of Energy (DOE) is getting a strong response to a government effort to help commercialize breakthrough fossil fuel technology. DOE Loan Program Office Executive Director Peter Davidson told the PennWell conference in Nashville, Tenn., that DOE is already

starting to receive proposals for billions of dollars in federal loan guarantee money for breakthrough fossil fuel technology. DOE announced release of an \$8 billion program of loan guarantees for advanced fossil energy projects in December. Proposals have already started coming in, Davison said, noting that it often takes several months to put together a proposal.

[Fuel Cells Starting To Make an Impact at Grid Scale](#)

[Power Magazine, Aug. 20] Long viewed as a potential “next big thing” for power generation—often drawing unwarranted hyperbole in the process—and more recently as niche distributed generation, fuel cells are finally beginning to make some noise at grid scale. Hydrogen- and natural gas-powered fuel cells have been deployed over the past decade in behind-the-meter and microgrid applications for on-site generation, where their simplicity, reliability, and very low emissions offered advantages over diesel generators and similar solutions. The waste heat generated by the fuel cell process also allows them to step into on-site combined heat and power applications. Their ability to use renewable fuel such as biogas even enables them to fill renewable energy mandates in some areas. Such systems have typically been sub-megawatt scale or, at most, a few megawatts in capacity. One good example is the fuel cell system at the Gills Onions processing plant in Oxnard, Calif. The two-cell, 600-kW system, supplied by Danbury, Conn.-based FuelCell Energy (FCE) and installed in 2009, runs off biogas generated from onion waste in an anaerobic digester. The \$10.8 million system saves Gills more than \$1 million a year in avoided energy and waste handling costs, meaning it will have paid for itself in less than a decade.

[GE Launches Solar Transformers](#)

[Power Engineering, Aug. 25] GE's Digital Energy business (NYSE: GE) has announced the launching of its three-phase, PROLEC-GE Solar Pad-Mounted Transformer. The transformers allow energy coming from the solar inverter, and generated by photovoltaic (PV) cells in solar farms, to be transformed from low voltage to medium voltage. “The increasing importance of solar generation will require grid operators and the PV industry to develop strategies to ensure solar continues to play a major part in the global generation mix,” said Rosario Lopez, commercial director, PROLEC-GE. “Our three-phase pad-mounted transformer solution will help to support solar growth trends by improving the ROI for solar developments.”

[Trina Solar Duo-Max Module Receives Quality Certifications from UL and TUV Rheinland](#)

[PV Energy Trend, Aug. 22] Trina Solar Limited, a global enterprise in photovoltaic (“PV”) modules, solutions, and services, announced on August 21st the company's new Duo-Max module, a 72-cell frameless dual glass module (the PEG14 and PDG14 series), has received quality certifications, including the IEC61215, IEC 61730 and UL1703 standards, from world-leading independent testing and certification organizations, UL and TUV Rheinland. The Duo-Max module comprises two layers of 2.5mm thin heat-strengthened glass, which replace the conventional glass and back sheet structure. The Duo-Max module is a highly reliable and durable PV product that is able to maintain high standards of performance in harsh environments such as desert, tropical and mountain areas. The Duo-Max products offers high levels of resistance to degradation caused by thermal cycling, moisture ingress, mechanical loading, micro-cracking, PID, module warping, UV aging, as well as corrosion from ammonia, acid, alkali, salt mist, and sand abrasion. The Duo-Max module also meets UL's Fire Class A safety standards. Trina Solar is the first PV manufacturer to offer a product that meets the most stringent PID testing conditions of 1500V system voltage under relative humidity of 85% and a temperature of 85°C for 192 hours. It is not necessary to use system grounding for Duo-Max modules, which reduces installation costs. The frameless Duo-Max module comes in 60-cell and 72-cell versions and is suitable for both utility scale power plants and Distributed Generation PV systems. Both the 60-cell and 72-cell frameless dual glass module products carry a 30-year linear warranty with a maximum 0.5% degradation per year.

LEGISLATION AND REGULATION

[EPA's Final Rule for 316\(b\) Effective October 14](#)

[Power Engineering, Aug. 20] [The 316\(b\) standards](#) under the [Clean Water Act](#) was published in the Federal Register on Aug. 14, meaning the rule set forth by U.S. Environmental Protection Agency (EPA) becomes effective Oct. 14. The Final Rule becomes effective 60 days from the publication date. According to the EPA, the final rule affects 544 existing power generating facilities that withdraw more than 2 million gallons per day of water from U.S. waters and use at least 25 percent of the water they withdraw for cooling purposes. The rule requires that the location, design, construction and capacity of cooling water intake structures [reflect the best available technology](#) for minimizing negative environmental impacts. Facilities that use more than

125 million gallons per day are required to conduct studies to determine what controls will be required. The national requirements will be implemented through National Pollutant Discharge Elimination System (NPDES) permits.

[FERC Approves Clean Line To Transmit Wind Power from Oklahoma to Tennessee](#)

[timesfreepress.com, A Houston company that plans to build a \$2 billion transmission line from Oklahoma to Tennessee has gained approval from the Federal Energy Regulatory Commission to negotiate power rates and bilateral agreements for all of its proposed 3,500 megawatt electricity route. Clean Line Energy announced Tuesday that FERC had approved its plans for the 700-mile "Plains & Eastern" line to carry wind-generated electricity from the Oklahoma Panhandle to the western edge of TVA's service territory. The transmission company is still trying to get federal approval for a joint venture with the Southwestern Power Administration in order to gain utility status for the proposed Direct Current line and its substations. But FERC's decision last week will help Clean Line begin to pick applicants and prices from among the applicants that collectively offered proposals for more than 17,000 megawatts of wind generation, if the project is ultimately approved and built.

[Geothermal Power Steaming Over Wind and Solar Energies](#)

[Forbes, Aug. 25] All the talk about the government subsidies given to the various [energy](#) forms has one fuel source steaming: geothermal power, which ranks fourth among all renewable energies in terms of total capacity — after wind, solar and hydro. Geothermal stands in the shadows of the higher profile green energies, both literally and figuratively. In actuality, energy is captured and then extracted from deep underground with the steam used to generate electricity. Because the heat that is contained at the earth's core is limitless, it is a sustainable energy form and one that — unlike wind and solar — is not contingent on the weather. Most of the geothermal is concentrated in the western United States, with California having 80 percent of that total share. To this end, the state has a renewable portfolio standard that requires its incumbent utilities to provide at least a third of their electricity from renewable sources by 2020. But [Calpine CPN +1.42%](#) Corp., which owns and operates geothermal facilities that are just north of San Francisco, says that California's regulatory structure hurts new investment geothermal facilities. Altogether, it generates 725 megawatts in [The Geysers](#), which has 1,517 megawatts of installed geothermal capacity. The company would like to modernize its operations in The Geysers, if it is able to enter into long term power contracts with the utilities that must comply with the portfolio requirements. Utilities, though, are inclined to buy wind and solar energies that have more tax advantages. According to the [California Public Utilities Commission](#), the state's main providers that include [Sempra Energy SRE +0.33%](#), Southern California [Edison Edison](#) and [PG&E PCG +0.83%](#) Corp. have signed contracts for 6,000 megawatts of wind and solar each between 2003 and 2013. Meanwhile, only 100 megawatts of geothermal resources were bought during the same time period. Bills are pending in the California assembly, however, that would require utilities to procure 500 megawatts of geothermal by 2024. Critics say that all energy forms should compete on a level field and that the additional portfolio requirements distort the marketplace. So, what could make geothermal power more competitive — a fuel that now provides less than 1 percent of the world's power?

[Good Fracking Day for American Steel: Tariffs Slapped on Imported Oil-Country Tubular Goods](#)

[Phoenix Business Journal, Aug. 22] American steel companies won a victory Friday when the [U.S. International Trade Commission](#) slapped tariffs against steel tubes used for oil exploration imported from six countries. The [ITC](#) ruled that India, South Korea, Taiwan, Turkey, Ukraine and Vietnam are hurting U.S. industry by selling oil-country tubular goods in the U.S. at less than fair value. It also ruled that the governments of India and Turkey are subsidizing these imports. U.S. manufacturers praised the decision. "The ITC made the right call today; steelworkers and manufacturers have clearly suffered," said [Scott Paul](#), president of the Alliance for American Manufacturing. "We hope this decision will boost the prospects for steel jobs and companies in this important market serving America's energy independence efforts." Ohio's two U.S. senators, who had been [pressing the ITC to address this dumping](#), also were pleased.

[Microsoft Leaves Lobbying Group ALEC amid Split Over Renewables](#)

[Bloomberg, Aug. 21] Microsoft Corp. has left the American Legislative Exchange Council because of concerns about the lobbying group's opposition to renewable energy, a coalition of activist investor groups said. The Sustainability Group and Walden Asset Management, asset management companies that describe themselves as focused on sustainable investing, said Microsoft confirmed in e-mails that it's no longer a part of ALEC after the groups pressed the company to abandon it. Microsoft is a leader on carbon issues—in 2012, it committed to becoming carbon neutral, and is one of the largest corporate purchasers of renewable energy," the Boston-based groups said in a news release. "Thus, we believe that its affiliation with ALEC, which is

actively fighting policies that promote renewable energy, was incongruous. In addition, there were numerous other ALEC actions that conflicted directly with Microsoft's values." Arlington, Va.-based ALEC has drafted model legislation for use in state legislatures to roll back renewable fuel standards across the country. Its members include ExxonMobil Corp., Peabody Energy Inc., American Electric Power Co. and Koch Industries Inc., according to the Checks and Balances Project, a nonprofit watchdog group that supports the use of clean energy. In response to a request for comment, Microsoft told Bloomberg BNA: "In 2014, Microsoft decided to no longer participate in the American Legislative Exchange Council (ALEC) Communications and Technology Task Force. Our trade association memberships are determined annually on a case by case basis and are based on a number of factors, including evolving policy priorities, business needs and available budgets."

[U.S. Biodiesel Industry Suffers As Biofuel Rule Delays Drag On](#)

[Reuters, Aug. 20] WASHINGTON – The long wait for final 2014 federal biofuel use targets has compounded troubles for U.S. biodiesel producers already hit by the Obama administration's preliminary plan to slash renewable fuel requirements. Nearly nine months behind schedule, 2014 targets from the Environmental Protection Agency could arrive in September at the earliest. In the meantime, biodiesel producers have been squeezed by falling prices, as refiners and blenders delay purchases until they see a final mandate. Debate about the future of the Renewable Fuel Standard has mostly focused on ethanol. But the smaller biodiesel industry has arguably been hurt more by proposed production cuts, said Anne Steckel, vice president of federal affairs at the National Biodiesel Board.

WESTERN POWER

[Boulder's Smooth Move To Muni Counts on Xcel Playing Nice](#)

[Energy Prospects West, Aug. 19] A new report released by the city of Boulder on its plan to leave Xcel and form a municipal utility compares transition plans under two scenarios: one in which Xcel cooperates with Boulder, and one in which it doesn't. [The report by PowerServices Inc.](#) finds that under the second scenario, Boulder would need to do a lot more costly prep work in advance of the muni's tentative operation date of late 2016, including nailing down long-term power supply contracts and having its own crews ready to operate the distribution system -- which is still not under Boulder's control. "The most significant prerequisite for transition is flexibility in the sequencing and scheduling of activities," PowerServices wrote in its August 19 report. "The path towards electric municipalization is not one-dimensional. Uncertainties are amplified if the owner of the system to be acquired does not cooperate and acts as an impediment to the acquisition process. The city must first manage the risks of acquisition while prioritizing the fundamentals of an electric utility: safety and reliability." In mid-July, the city of Boulder filed in Boulder County District Court to condemn Xcel's local distribution system, after appealing and then ignoring a Colorado Public Utilities Commission ruling that the city first needed Colorado PUC approval before it filed for condemnation. In response, Xcel asked the court to toss out the case on grounds that the city should first get approval from the CPUC. "The CPUC first needs to determine what assets the city can and cannot take. That needs to be ruled on before the city can move ahead," Xcel spokeswoman Michelle Aguayo said.

[Brightsource Responds To Critics About Bird Deaths at Ivanpah CSP Plant](#)

[CSP World, Aug. 20] Avian mortality at solar plants, particularly Concentrated Solar Power plants, and even more particularly at tower type CSP plants is a topic gaining significance in some medias, due to the commissioning and operation of Ivanpah, the first truly large-scale tower CSP plant in the world. So far, only data from former Solar Two and other small-scale tower plants in Spain were available, but not from a large-scale one. Once the first plant has entered into operation, the figures are being released according to the compliance procedure included in the permission issued by the California Energy Commission. BrightSource had performed some studies in a small-scale CSP Israel facility which were submitted to the company's other projects being assessed by the CEC, due to a lack of data from similar projects in size.

[Expert Calls for Nuke Plant Closure](#)

[Associated Press, Aug. 25] LOS ANGELES — A senior federal nuclear expert is urging regulators to shut down California's last operating nuclear plant until they can determine whether the facility's twin reactors can withstand powerful shaking from any one of several nearby earthquake faults. Michael Peck, who for five years was Diablo Canyon's lead on-site inspector, says in a 42-page, confidential report that the Nuclear Regulatory Commission is not applying the safety rules it set out for the plant's operation. The document, which was obtained and verified by The Associated Press, does not say the plant itself is unsafe. Instead, according to Peck's analysis, no one knows

whether the facility's key equipment can withstand strong shaking from those faults — the potential for which was realized decades after the facility was built. Continuing to run the reactors, Peck writes, "challenges the presumption of nuclear safety." Peck's July 2013 filing is part of an agency review in which employees can appeal a supervisor's or agency ruling — a process that normally takes 60 to 120 days, but can be extended. The NRC, however, has not yet ruled. Spokeswoman Lara Uselding said in emails that the agency would have no comment on the document. The NRC, which oversees the nation's commercial nuclear power industry, and Diablo Canyon owner Pacific Gas and Electric Co., say the nearly three-decade-old reactors, which produce enough electricity for more than 3 million people annually, are safe and that the facility complies with its operating license, including earthquake safety standards.

[Nevada Residents Ask Utilities Commission for Rooftop Solar Programs](#)

[Power Engineering, Aug. 21] On Wednesday, Nevada residents gathered at the [Public Utilities Commission of Nevada](#) (PUCN) with more than 4,300 petition signatures supporting [rooftop solar programs](#). "Rooftop solar is putting Nevada energy customers in charge of their electricity supply and utility bills like never before. By reducing the need for expensive traditional power plants and utility infrastructure, this local clean energy investment is a cost-saver for solar and non-solar customers alike," said Susannah Churchill, regional director for Vote Solar. "We urge the state's policymakers to recognize these benefits and ensure that Nevada's solar customers continue to be fairly compensated for them with a strong net metering program." The solar supporters included consumers, businesses, environmental groups, and participating organizations Vote Solar, TASC, Sierra Club, and CREDO.

[Two Westinghouse AP1000 Nuclear Reactors in the Works for Utah](#)

[Power Engineering, Aug. 20] [Westinghouse Electric Co.](#) and [Blue Castle Holdings](#) signed a memorandum of understanding to develop a two-unit AP1000 nuclear power plant at the Green River site in Utah. The companies signed a definitive agreement to jointly develop a scope of activities for the Blue Castle Project, including licensing and permitting, design, engineering, procurement, construction, installation, commissioning, nuclear fuel and operation and maintenance of the plant. About 2,500 jobs are expected to be created during construction, with 1,000 full-time positions during the plant's 60-year operating life.

ARIZONA STATE INCENTIVES/POLICIES

ARIZONA COMMERCE AUTHORITY (ACA)

INCENTIVES

Arizona has lowered taxes, streamlined regulations, and established a suite of incentives to support corporate growth and expansion. The Arizona Competitiveness Package, groundbreaking legislation adopted in 2011, makes it easier for existing Arizona companies to prosper and establishes Arizona as one of the most desirable places for expanding companies to do business. Give your company a competitive edge by utilizing Arizona's incentives.

- [Job Training](#)
- [Quality Jobs](#)
- [Qualified Facility](#)
- [Computer Data Center Program](#)
- [Research & Development](#)
- [Foreign Trade Zone](#)
- [Military Reuse Zone](#)
- [Angel Investment](#)
- [Renewable Energy Tax Incentive](#)
- [Healthy Forest](#)
- [Sales Tax Exemption for Machinery and Equipment](#)
- [Lease Excise](#)
- [Additional Depreciation](#)
- [Work Opportunity](#)
- [Commercial/Industrial Solar](#)

- [SBIR/STTR](#)
- [Private Activity Bonds](#)
- [QECB's](#)

(ACA) PROGRAMS

DATABASE OF STATE INCENTIVES FOR RENEWABLES & EFFICIENCY (DSIRE)

- [Arizona Incentives/Policies](#)
- [Federal Incentives/Policies](#)
- [Solar Policy News](#)

DSIRE provides summaries of current solar policy developments and an archive of past solar policy developments. Current solar news appears below the news archive, which is searchable by several criteria.

GRANTS

The following solicitations are now available:
(Click on title to view solicitation)

- [Hydrogen Fuel Cell Technologies Incubator](#) - Response due Sep. 3, 2014
- [Manufacturing Machines and Equipment](#) - Response due Sep. 15, 2014
- [Secure and Trustworthy Cyberspace](#) - Response due Sep. 19, 2014
- [Nanomanufacturing](#) – Current Closing Date for Applications: Sep. 15, 2014
Full Proposal Window: Sep. 1, 2014 – Sep. 15, 2014 Full Proposal Window: Feb. 01, 2015 – Feb. 17, 2015
- [Civil Infrastructure Systems](#) – Sep. 15, 2014 Submission Window Date(s) (due by 5 p.m. proposer's local time): Full Proposal Window: Sep. 01, 2014 – Sep. 15, 2014
Full Proposal Window: Feb. 01, 2015 – Feb. 17, 2015
- [Frontier Observatory for Research in Geothermal Energy \(FORGE\)](#) – Close Date: Oct. 1, 2014
- [Vehicle Technologies Alternative Fuel Vehicle Deployment Initiatives](#) – Concept Paper Submission Deadline: Aug. 1, 2014 Submission Deadline: Oct. 1, 2014
- [Deployment of Clean Energy & Energy Efficiency on Indian Lands #DE-FOA-0001021](#) – Full Application Submission Deadline: October 2, 2014. A **Webinar** will be held on **August 14**. The intent of this webinar is to provide information for potential applicants to the Energy Departments Funding Opportunity for the Deployment of Clean Energy and Energy Efficiency on Indian Lands (DE-FOA-0001021). - Space is limited - Reserve your Webinar seat now at: <https://www1.gotomeeting.com/register/140937312>
- [Energy for Sustainability](#) – Current Closing Date for Applications: Nov. 5, 2014 Full Proposal Window: Oct. 01, 2014 – Nov. 5, 2014
- [Energy, Power, and Adaptive Systems](#) - Close Date: Nov. 3, 2014
- [National Robotics Initiative](#) - Response due Nov. 14, 2014
- [NSF/DOE Partnership on Advanced Frontiers in Renewable Hydrogen Fuel Production Via Solar Water Splitting Technologies 2014-2016](#) - Close Date: Dec. 11, 2014
- [Energy for Sustainability](#) – Current Closing Date for Applications: Nov. 5, 2014
- [Advanced Fossil Energy Projects](#) - Solicitation Number: DE-SOL-0006303 Expiration Date: Nov. 30, 2016
- [Repowering Assistance Program](#) - Ongoing
- [Rural Business Enterprise Grants](#) - Ongoing
- [Rural Business Opportunity Grants](#) - Ongoing
- [Sustainable Agriculture Research and Education Grants](#) - Ongoing
- [Renewable Energy RFP's - Solicitations for Renewable Energy Generation, Renewable Energy Certificates, and Green Power](#) – Various Deadlines










- U.S. Dept. of Agriculture - Rural Development Grant Assistance
- Green Refinance Plus - Ongoing

ENERGY-RELATED EVENTS

2014

- ✚ [Symposium on Thermal & Catalytic Sciences for Biofuels & Biobased Products](#)
September 2-5 Denver, CO
- ✚ [EPI's 4th Annual Energy Policy Research Conference](#)
September 4-5, 2014 San Francisco, CA
- ✚ [Economic Outlook 2015](#)
September 5 Phoenix, Arizona
- ✚ [Native Learning Centers Indian Housing Training Conference](#)
September 10-14 Tulsa, OK
- ✚ [Arizona Technology Summit](#)
September 17 Phoenix, AZ
- ✚ [HTUF 2014 National Meeting - The Forum for Action in High-Efficiency Commercial Vehicles](#)
September 22-24 Argonne, National Lab - Argonne, IL
- ✚ [World Energy Engineering Congress](#)
October 1-3 Washington, DC
- ✚ [Geothermal Energy Expo](#)
September 28-October 1 Portland, OR
- ✚ [SRP 2015 Economic Forecast](#)
October 2 Phoenix, AZ
- ✚ [AWEA Offshore Windpower Conference & Exhibition 2014](#)
October 7-8 Atlantic City, NJ
- ✚ [Ute Tribe Energy Conference & Expo](#)
October 14-15 Denver, CO
- ✚ [National Alternative Fuel Vehicle \(AFV\) Day Odyssey](#)
October 17, 2014
- ✚ [Solar Power International](#)
October 20-23 Las Vegas, NV
- ✚ [GreenBuild International Conference & Expo](#)
October 22-24 New Orleans, LA
- ✚ [World Bio Markets USA](#)
October 27-29 San Diego, CA
- ✚ [VERGE SF 2014](#)
October 27-30.. San Francisco, CA
- ✚ [Governor's Celebration of Innovation](#)
November 13 Phoenix, AZ
- ✚ [ACEEE Intelligent Efficiency Conference](#)
November 16-18.. San Francisco, CA
- ✚ [Renewable Energy Markets Conference](#)
December 2-4 Sacramento, CA

2015

-  [Solar Power Generation USA 2015](#)
February 4-5, 2015 San Diego, CA
-  [GreenBiz Forum 2015](#)
February 17-19, 2015 Phoenix, AZ
-  [2015 Sustainability Solution Festival](#)
February 17-22, 2015 Phoenix, AZ
-  [Solar Power Generation Mexico](#)
May 19-20, 2014 World Trade Center, Mexico
-  [Green Building Lecture Series](#)
Granite Reef Senior Center Scottsdale, AZ
-  [ASU Sustainability Series Events](#)
-  [Green Building Lecture Series](#) Scottsdale, AZ
-  [ENERGY STAR Webinars](#)
-  [U.S. Dept. of Energy Tribal Renewable Energy Webinar Series for 2014](#)